

Attorney Docket No. I-6909-1919 US

IN THE CLAIMS:

Please cancel claims 17-26 and 29-34 without prejudice or disclaimer to the subject matter contained therein.

*Sub X* 35. (NEW) An immunogenic protein from *Dictyocaulus viviparus*, wherein the protein has a molecular weight of 15,000 to 18,000 daltons, and an isoelectric point between 5.3 and 5.9

*Sub X* 36. (NEW) The immunogenic protein according to claim 35, wherein the protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO:1; SEQ ID NO:2; SEQ ID NO:3; SEQ ID NO:4; SEQ ID NO:5; SEQ ID NO:6; and SEQ ID NO:7.

*Sub X* 37. (NEW) The immunogenic protein according to claim 35, wherein the protein has a molecular weight of  $16,000 \pm 1,500$  and an isoelectric point of 5.6

*Sub X* 38. (NEW) The immunogenic protein according to claim 35, comprising an amino acid sequence of SEQ ID NO:30, or part thereof having immunogenic properties.

39. (NEW) An isolated nucleic acid molecule which encodes the protein according to claim 35.

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40. (NEW) The isolated nucleic acid according to claim 39,  
wherein the nucleic acid sequence is selected from the group  
consisting of SEQ ID NO:10; SEQ ID NO:11; SEQ ID NO:12; SEQ ID  
NO:13; and SEQ ID NO:14.

41. (NEW) The isolated nucleic acid according to claim 39,  
comprising SEQ ID NO:29 or a nucleic acid that hybridizes, under  
stringent conditions, to a nucleotide sequence according to SEQ  
ID NO:29.

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42. (NEW) A method for identifying a cDNA clone which  
comprises an isolated nucleic acid sequence according to claim  
39, the method comprising:

(a) obtaining a radioactively or nonradioactively labeled  
oligonucleotide molecule having a sequence selected from the  
group consisting of SEQ ID NO:8; SEQ ID NO:9; SEQ ID NO:10; SEQ  
ID NO:11; SEQ ID NO:12; SEQ ID NO:13; and SEQ ID NO:14, or parts  
thereof that hybridize to a sequence of the group under  
stringent conditions; and

(b) screening a cDNA library prepared from *Dictyocaulus*  
*viviparus* using the labeled oligonucleotide molecule.

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43. (NEW) A method for identifying a cDNA clone which comprises an isolated nucleic acid sequence according to claim 39, the method comprising:

(a) obtaining a polymerase chain reaction primer having a sequence selected from the group consisting of SEQ ID NO:8; SEQ ID NO:9; SEQ ID NO:10; SEQ ID NO:11; SEQ ID NO:12; SEQ ID NO:13; and SEQ ID NO:14, or parts thereof that hybridize to a sequence of the group under stringent conditions; and

(b) screening a cDNA library or RNAs prepared from *Dictyocaulus viviparus* using the primer.

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44. (NEW) A method for producing a recombinant polypeptide molecule, comprising:

expressing the cDNA clone identified according to claim 42,  
and

purifying expressed polypeptide molecule.

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45. (NEW) A vaccine, comprising:

a effective amount of the protein according to claim 35,

and

a suitable adjuvant or carrier.

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J 46. (New) A method for immunizing cattle against  
*Dictyocaulus viviparous*, comprising:

administering to a cattle in need thereof a vaccine  
according to claim 45.

C ( 47. (NEW) A diagnostic kit, comprising:

the protein according to claim 35.

48. (NEW) A diagnostic kit, comprising:

the polypeptide sequence according to claim 39.

49. (NEW) A recombinant vector, comprising:

the nucleic acid molecule according to claim 39.

50. (NEW) A host cell, comprising:

the vector according to claim 49.